#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



### 

#### (43) International Publication Date 6 October 2005 (06.10.2005)

#### **PCT**

# (10) International Publication Number WO 2005/093445 A1

- (51) International Paint Classification7:
- \_\_\_\_

G01R 31/311

(21) International Application Number:

PCT/IB2005/000755

- (22) International Filing Date: 23 March 2005 (23.03.2005)
- (25) Filing Language:

English

(26) Publication Languages

English

(30) Priority Data: 040(665.0

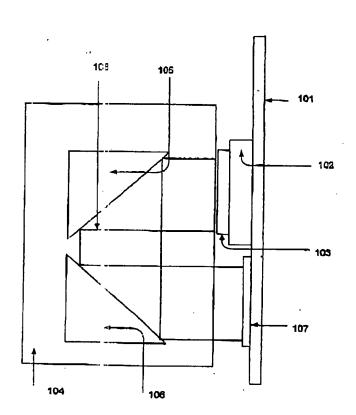
25 March 2004 (25.03.2004) GB

- (71) Applicant (for all designated States except US); MELEXIS NV BE/BE]; Microelectronic Integrated Systems, Rozendaulstraat 12, B-8900 leper (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BERGMANN, Peter [DE/DE]; c/o Melcais GmbH, Haarbergstrasse 67, 99097 Erfon (DE).

- (74) Agents: CHURCH, Simon et al.; Wilson Gunn Skerrett, Charles House, 148/9 Great Charles Street, Birmingham B3 311T (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, E3, F1, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP KB, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, ST, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, E<sup>c</sup>, FI,

[Consinued on next page]

(54) Tille: TESTING INTEGRATED CIRCUITS



(57) Abstract: A testing apparatus for a radiation sensing integrated circuit comprises a load board (101), a test socket (102), suitable for the device under test DUT (103), and a plunger (104). A radiation source (101) is provided on the load board (101) adjacent to the test socket (102). The radiation source (107) generates radiation for testing the response to stimulus of the radiation sensing element of the DUT (103). To enable the sensing element of the DUT (103) to be exposed to the radiation, a pathway (108) is provided through plunger (104). The pathway (108) has a U-Shape with the end of one side of the U being adjacent to the radiation source (107) and the other end of the U being adjacent to the sensing element of DUT (103). Prisms (105, 106) are mounted at the base of each side of the U so as to re-lect incident light along the pathway (108), such that radiation entering the pathway (108) from the radiation source (107), travels along the U and exits the other end of the U where it is hen incident upon the radiation sensing element of DIST (103).

## WO 2005/093445 A1

FR, GB, GR, HU, 1E, IS, IT, LT, LU, MC, NL, PL, PT, RO, For two-letter codes and other abbreviations, refer to the Guid-SE, SL, SK, TR), O \PI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR NE, SN, TD, TG).

ance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### Published:

- with international rearch report